

REMARKS

Claims 1-22 are pending in this application. Claims 1 and 3 are independent claims and are amended, and no claims have been canceled. In light of the above amendments and below remarks, favorable reconsideration and allowance of the present application are respectfully requested.

Rejections under 35 U.S.C. §102 and §103 – DOANE et al.

Claims 1, 3, 6, 14, 21 and 22 stand rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,861,216 (“Doane”). This rejection is respectfully traversed.

Doane allegedly teaches a foam article including a self-supporting structure 12, and a hydroxyl-functional polyester layer 14, and that may further include a third layer 16, which is said to be desired to increase heat and moisture resistance. (*Doane*, col. 3, line 63 – col. 4, line 37 and FIGS 1-2).

In a specific example of the application of the hydroxyl-functional polyester layer 14, *Doane* further teaches a method of adhering a BIS Adipic film to an existing starch and PVOH blended film, where compression in a Carver press is said to adhere the BIS Adipic film to both sides of the starch and PVOH blended film. (*Doane*, col. 13, lines 15-19). The compression taught by this process clearly creates a smoother interface between the BIS Adipic film and the starch and PVOH blended film and therefore this process fails to “maintain the irregular surface of the biodegradable expanded molded article” as recited by the amended claims 1 and 3.

Applicants further submit that the above process creates a much weaker adhesion between the BIS adipic film and the starch and PVOH blended film, because the attachment of the BIS Adipic film occurs after the formation of the starch and PVOH blended film into a film shape. *Doane* allegedly further teaches other methods of attaching the hydroxyl-functional polyester layer 14, including brushing, dipping, spraying, compression molding, coextruding, and hot roll laminating. Applicants submit that all of these techniques suffer from the same problem – namely weak adhesion created by attaching the hydroxyl-functional polyester layer 14 after the formation of the self-structure 12.

Thus, because *Doane* only teaches techniques for adhering the hydroxyl-functional polyester layer 14 to the self-supporting structure 12 after the formation of the self-supporting

structure 12, and because these techniques may include compression, *Doane* cannot teach or suggest the strong coating adherence provided by “a thermally softened coating film attached to the irregular surface of the biodegradable expanded molded article during the expansion molding so as to maintain the irregular surface of the biodegradable expanded molded article” as recited by the amended claims 1 and 3.

Furthermore, the Examiner alleges the following:

[T]he molded article of *Doane* as shown in Figure 2 is formed of a foamed material. To the Examiner the foamed material inherently have an irregular surface. (11/27/2007 Office Action, page 3) (Emphasis added).

[T]he biodegradable expanded molded article of *Doane* as disclosed in the abstract and at column 9 lines 12-13 and that of Applicant is structurally and compositionally equivalent and therefore it would necessarily have irregular surface having bumps and dips. Further, it is known that no surface is perfectly smooth. Thus, the claim limitations of irregular surface would obviously have been present once the biodegradable molded article of *Doane* is provided. (11/27/2007 Office Action, page 3) (Emphasis added).

Applicants respectfully disagree and refer the Examiner to Applicants’ FIG. 12(a), which illustrates examples embodiments of a coating film 12 that may be attached by an adhesive layer 13 to an expanded molded article 11 using an after attaching method. As shown in FIG. 12(a), the surface of the molded article 11 created by the after attaching method becomes smooth and thus does not possess “an irregular surface” as recited by claim 1. (U.S. PGPUB 2005/0202229, paragraphs [0273] and [0283]; *Disclosure* page 69, lines 8-15 and page 72, line 18 – page 73, line 1).

Therefore, Applicants submit that foamed materials do not inherently possess irregular surfaces as the Examiner asserts. Consequently, Applicants submit that, because *Doane* allegedly is silent towards the surfaces of its foam articles, the Examiner cannot assume that a foamed article according to *Doane* necessarily has a smooth surface or “an irregular surface” as recited by claim 1.

Therefore, Applicants respectfully request that the rejection of claims 1 and 3 be withdrawn, and also that the rejections of claims 6, 14, 21, and 22 also be withdrawn, at least by virtue of their dependency upon claims 1 and 3.

Rejections Under 35 U.S.C. § 103 – DOANE in view of BRADT

Claims 7 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Doane* in view of U.S. Patent No. 5,888,599 (“*Bradt*”).

Applicants submit that, even if *Bradt* could be combined with *Doane* (which Applicants do not admit or believe), nothing in *Bradt* cures the deficiencies of *Doane* discussed above, and therefore Applicants respectfully request that the rejections of claims 7 and 15 be withdrawn, at least by virtue of their dependency upon claims 1 and 3, respectively.

Rejections under 35 U.S.C. §102 and §103 – ANDO et al.

Claims 1, 3, 8-12 and 16-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,639,518 (“*Ando*”). This rejection is respectfully traversed.

Ando allegedly teaches in Example 18 a sheet of material 21 prepared from sweet potato starch and sorbitol that is placed between two soybean protein sheets 22 to form a material 23 to be molded. The material 23 is said to be placed in the mold M1 and dielectrically heated. (*Ando*, col. 27 line 53 – col. 28, line 8). *Ando* allegedly further teaches that compression molding lamination was used in this example to laminate a tray-like molded article with sheets having water and moisture resistant properties. (*Ando*, col. 28, lines 50-52).

Applicants submit that, because *Ando* teaches compression molding lamination, *Ando* relies on pressure to apply water and moisture resistant sheets to a molded article, and further submit that the application of pressure creates a smoother interface between the sheets and the molded article.

Thus, nothing in *Ando* teaches or suggests “a thermally softened coating film attached to the irregular surface of the biodegradable expanded molded article during the expansion molding so as to maintain the irregular surface of the biodegradable expanded molded article” as recited by the amended claims 1 and 3.

Therefore, Applicants request that the rejections of claims 1 and 3 be withdrawn, and that the rejections of claims 8-12 and 16-20 be also be withdrawn, at least by virtue of their dependency upon claims 1 and 3.

Rejections Under 35 U.S.C. § 103 – ANDO in view of SHOGREN et al.

Claims 4, 5 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Ando* in view of U.S. Patent No. 6,146,573 (“*Shogren*”).

Applicants submit that, even if *Shogren* could be combined with *Ando* (which Applicants do not admit or believe), nothing in *Shogren* cures the deficiencies of *Ando* discussed above, and therefore Applicants respectfully request that the rejections of claims 4, 5, and 13 be withdrawn, at least by virtue of their dependency upon claims 1 and 3.

Rejections Under 35 U.S.C. § 103 – ANDO in view of ALTERI

Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Ando* in view of U.S. Patent No. 5,153,037 (“*Altieri*”).

Applicants submit that, even if *Altieri* could be combined with *Ando* (which Applicants do not admit or believe), nothing in *Altieri* cures the deficiencies of *Ando* discussed above, and therefore Applicants respectfully request that the rejection of claim 2 be withdrawn, at least by virtue of their dependency upon claims 1.

CONCLUSION

In view of the above remarks and amendments, Applicants respectfully submit that each of the rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley, Reg. No. 34,313 at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
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By



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